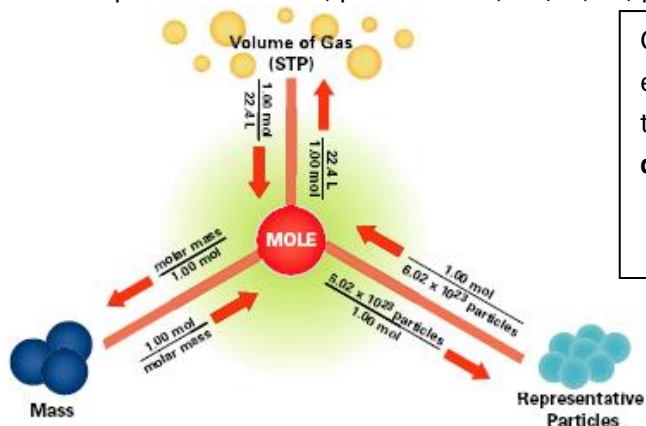


Kinetic theory, kinetic energy, assumptions about gases, gas pressure, vacuum, atmospheric pressure, barometer, STP(p 300-303), pascals, atmospheres, mm of Hg, average kinetic energy, Kelvin temperature, Avogadro's hypothesis, molar volume, molar volume at STP, $n=v/V$ and $n=m/M$ and $v/V=m/M$, (omit gas density calculations...replaced by conversions from mass \leftrightarrow volume. , Gas Stoichiometry, mol road map, compressibility, gas pressure-factors that affect it, amount of gas, volume, temperature, Gas Laws, Boyle's Law, Charles's Law,

Gay-Lussac's Law, Combined Gas Law, Ideal Gas Law, Ideal Gas Constant, How are ideal gases and real gases different from one another?, Dalton's Law of Partial Pressures, Ideal Gas Law @ two sets of conditions. p 407 Do 26 to 35, p 315 Do 58e,59c,60,62 , p 439 39 to 59



Can you explain this diagram?

Vocabulary Review

Match the correct vocabulary term to each numbered statement. Write the letter of the correct term on the line.

Column A

- _____ 1. At constant volume and temperature, the total pressure exerted by a mixture of gases is equal to the sum of the partial pressures of the component gases.
- _____ 2. The volume of a fixed mass of gas is directly proportional to its Kelvin temperature if the pressure is kept constant.
- _____ 3. The rate of effusion of a gas is inversely proportional to the square root of its molar mass.
- _____ 4. the contribution each gas in a mixture makes to the total pressure of that mixture
- _____ 5. a measure of how much the volume of matter decreases under pressure
- _____ 6. For a given mass of gas at constant temperature, the volume of the gas varies inversely with pressure.
- _____ 7. the tendency of molecules to move toward areas of lower concentration until the concentration is uniform throughout
- _____ 8. $\frac{P_1 \times V_1}{T_1} = \frac{P_2 \times V_2}{T_2}$
- _____ 9. the escape of a gas through a tiny hole in a container of gas
- _____ 10. $8.31 \text{ (L}\cdot\text{kPa)} / (\text{K}\cdot\text{mol})$

Column B

- a. combined gas law
- b. ideal gas constant (R)
- c. diffusion
- d. compressibility
- e. Boyle's law
- f. partial pressure
- g. Dalton's law of partial pressures
- h. effusion
- i. Charles's law
- j. Graham's law of effusion

←omit

←omit

